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1. The Sunga dynasty contributed significantly to the cultural and social development in ancient India. Discuss. (150 words) 10
प्राचीन भारत में सांस्कृतिक और सामाजिक विकास में शुंग वंश का महत्वपूर्ण योगदान रहा है। चर्चा कीजिए।

The sunga dynasty succeeded the Mauryan dynasty in the north. Its founder pusyamitra sunga, and important rulers like Agnimitra, Vasumitra, Bhagvata contributed to the cultural and social developments in ancient India.

Contributions to Cultural Development

① Art and Architecture :- Although there are accounts of the Sungs plundering many stupas yet :-

↳ Construction of gateway/torans near sanchi stupa

↳ Change in material from wood to stone and intricate carvings on Bharut stupa.

↳ Commissioned sculptures of Yaksha & Yakshagini's

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② Language
Patronised sanskrit - (Patanjali court poet)

③ Impacted by Brahmanism

Contributions to social Development

① Reflect a break from Ashokan culture of Dhamma and nonviolence

② Ruled kingdom with dominance (eg- conducted Ashvamedha Yagyas

③ Focus on consolidation of empire over expansion.

Thus a strong base built by the Sunga dynasty gave space to the succeeding dynasty (like Kanva) to have a firm control over north india

Mauryan → SUNGA → KANVA

Expanse of Sungas

VisionIAS

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2. Discuss the role of foreign nationals in the Indian freedom struggle during the Gandhian phase. (150 words) 10

भारतीय स्वतंत्रता संघर्ष के गांधीवादी चरण के दौरान विदेशी नागरिकों की भूमिका की विवेचना कीजिए।

Not only dedicated Indians, but the indian independence struggle saw the contributions of foriegners like Annie Besant, C.F andrews, Miraben (Madelein Slade) Satynanda Stokes, Sister Nivedita, etc.

Role of foriegners

① Annie Besant – set up homerule league to bring political consciousness to masses which was uptil now reserved for elite.

✓ Demanded self Rule
✓ member of theosophical society
✓ worked for women

② C.F Andrews – also known as Dinbandhu advocated the rights of Indians in other colonies and aroused public opinion in England against colonial exploitation.

(3) Miraben - influenced by Gandhiji, promoted khadi, charkha and Satyagrah, accompanied Gandhi to round table conference.

(4) Satyanand Stokes - american who fought against labour exploitation in shimla hills.

(5) Sister nivedita - worked for women upliftment and social development

(6) Sarala Ben - disciple of Gandhiji - helped families of social political prisoners

(7) V. Alwis - fought for tribal rights & set up Gond seva mahamandal.

Not only the above, but lord mountbatten also helped to convince princely states to join Indian union.

Thus, since the cause was just, the indian freedom struggle resonated with many foreigners

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3. Provide an account of the contributions of Ram Manohar Lohia during the Indian freedom struggle and in post-independence India. (150 words) 10
भारतीय स्वतंत्रता संघर्ष के दौरान एवं स्वातंत्र्योत्तर भारत में राम मनोहर लोहिया के योगदान का विवरण प्रस्तुत कीजिए।

Ram Manohar Lohia was a true gandhian and staunch supporter of Democratic socialism. His contribution to the Indian freedom struggle and provision of a socialist philosophy post independence is unparalleled.

Contribution during Indian Freedom Struggle

① Part of Congress underground radio - made people aware of their rights, encouraged protests against the exploitative rule, important figure in Quit India movement also managed various underground activities and parallel government. Sent to jail for same

② Also held key positions in All India Congress committee for foreign collaboration

③ Presented an alternative view of Congress through formation of Congress Socialist Party

Contributions post independence :-

① staunch supporter of the "Saptakranti" and 'chaturbhuj Rajneeti' which included 4 pillars of state governance

↳ Centre
↳ State
↳ District
↳ Village

this ideas were actualised through 73rd & 74th ammendment to provide democratic decentralisation in India

② Believed in Equality of castes, women & religious minorities.
↳ For this he worked with B.R Ambedkar. The positive affirmations given to marginalised is manifestation of Lohia's & Ambedkar's vision (Article 14, 15, 16 of Constitution")

Thus, Ram Manohar Lohia would forever be remembered as a true patriot and dommitted son of the Indian motherland

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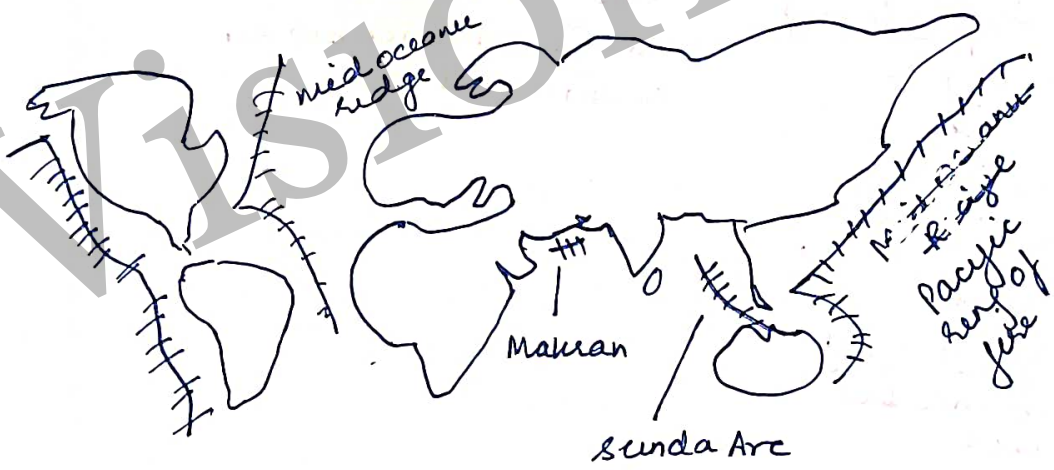
4. What do you understand by tsunamigenic zones? Giving an account of their global distribution, explain the propagation of tsunamis. **(150 words) 10**
सुनामी जनक क्षेत्रों से आप क्या समझते हैं? उनके वैश्विक वितरण का विवरण देते हुए, सुनामी के संचरण की व्याख्या कीजिए।

Tsunamigenic Zones are those areas which have frequent earthquakes and are commonly found along major subduction zone plate boundaries such as the Pacific Ocean, that can help generate Tsunamis

Global Distribution



Thus, Tsunamigenic zones are located at places of, ~~mid Oceanic ridges~~, pacific ring of fire, due to its high susceptibility of earthquakes and where indian plate creates convergent boundary (Makran coast & Sunda Arc)

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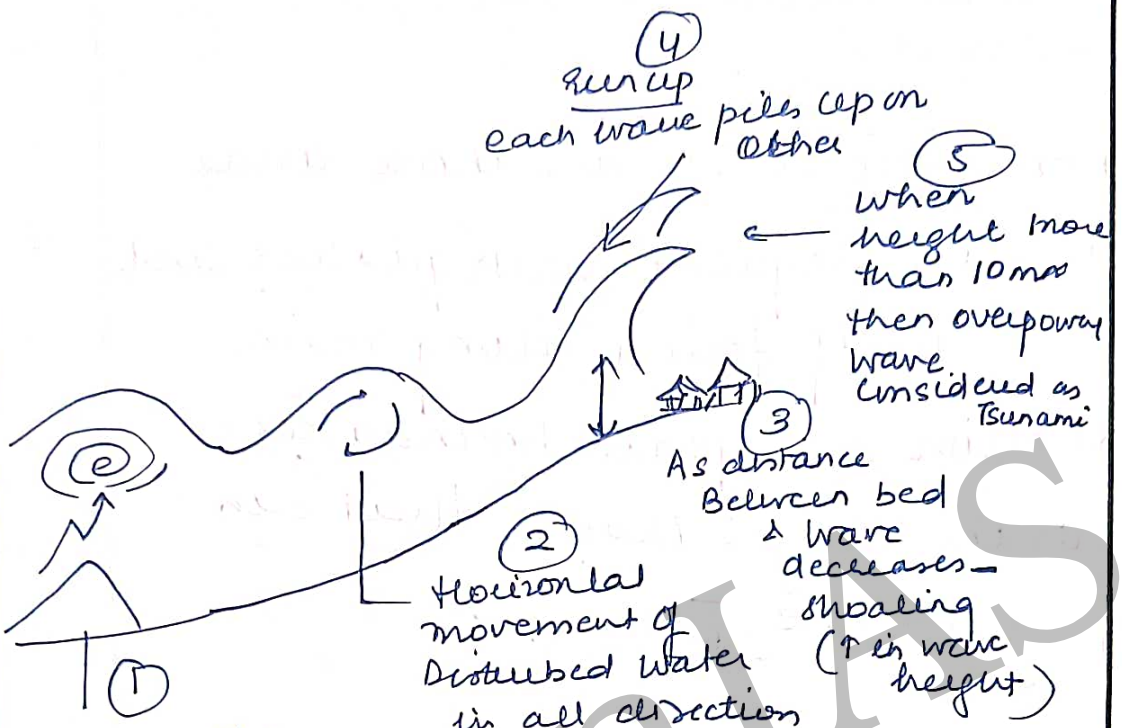
Propogation of Tsunami



earthquake caused by slipping/horizontal contact of tectonic plates/volcanic eruptions causing vertical disturbance in sea floor

Although turbulence not felt because large distance between Ocean bed & waves

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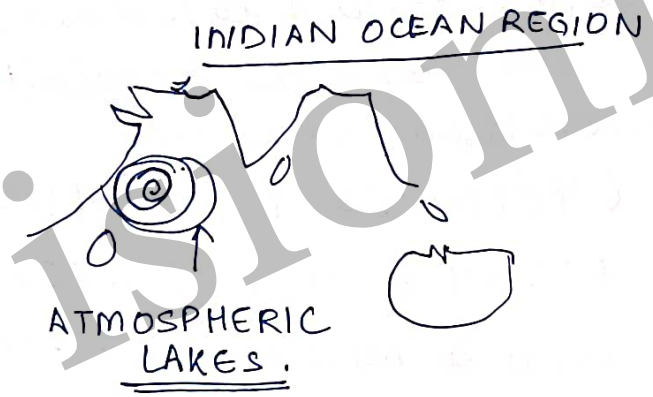
5. What are atmospheric lakes? Highlight their characteristics. (150 words) 10

वायुमंडलीय झीलें क्या हैं? उनकी विशेषताओं पर प्रकाश डालिए।

Atmospheric lakes are huge still masses of water vapour found in stagnant position in the atmosphere in the western Indian Ocean.

Characteristics of the Atmospheric Lakes



① Immobile, Stagnant
↳ in contrast to moving streams of atmospheric rivers

② Impact the humidity profile of the region :- Has an effect on the weather phenomena's like El Nino, La Nina, ENSO (Southern Ocean Oscillation) Indian Ocean

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dipoles) and thereby can impact the strength of Indian monsoon

(3) Causes precipitation in the Western Indian Ocean Region

(4) Usually works in tandem with moving streams of atmospheric water vapour (called atmospheric rivers) to affect global wind patterns)

Way forward

→ IMD studies to research the impact, periodicity on phenomenas like CYCLONES, TSUNAMIS, MARINE HEAT WAVES so as to build resilience in India's Disaster management

→ Study effects on Indian monsoon, precipitation in west coast to enable predictive analyses for farmers.

VisionIAS

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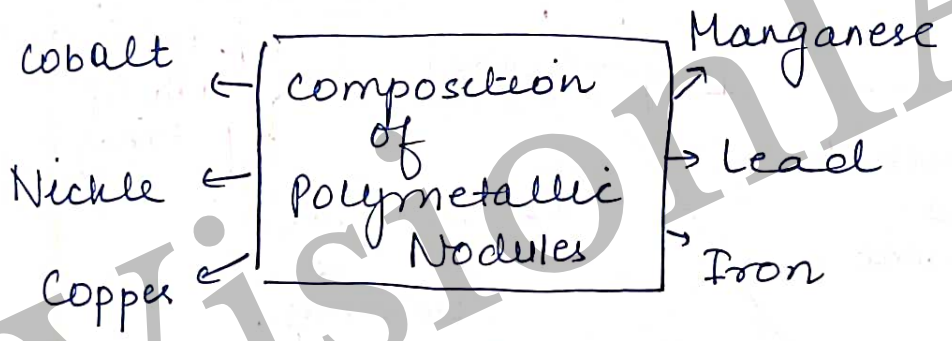
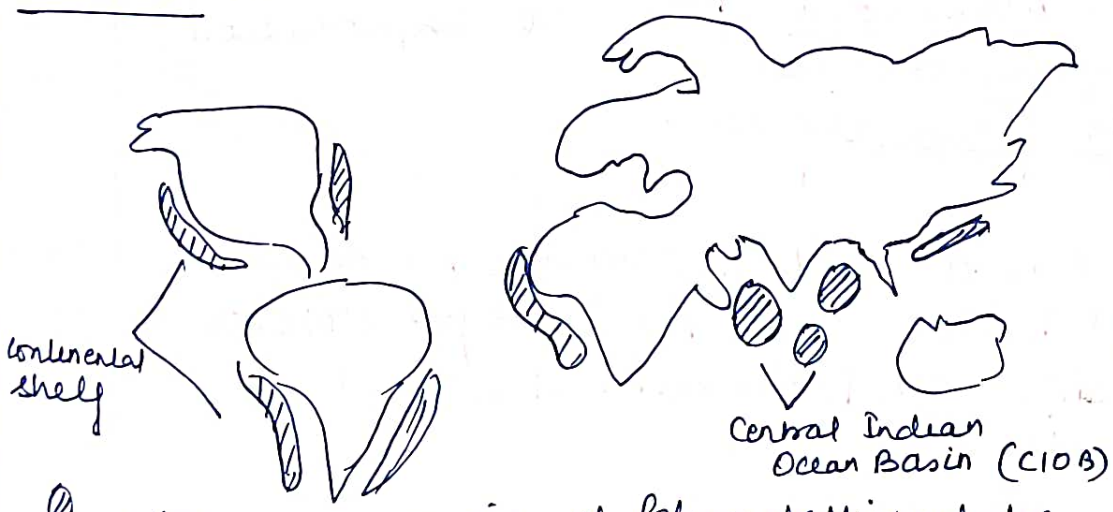
6. What are polymetallic nodules? Highlight their geographical distribution and state their significance. **(150 words) 10**

पॉलीमेटेलिक नोड्यूल्स (बहुधात्विक ग्रंथियां) क्या हैं? उनके भौगोलिक वितरण पर प्रकाश डालिए और उनका महत्व बताइए।

Pollymetallic nodules are mineral concentrations of manganese and Iron, found under the ocean (sea bed) which are extracted for commercially important rare earth minerals.



Geographical Distribution around the world.



⊘ → concentration of Polymetallic nodules.

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Therefore, as can be seen from the figure polymettalic nodules are majorly found in the continental shelves and abundantly in central Indian Ocean Basin

Significance of Polymettalic Nodules

Importance

- Enhance employment generation for coastal communities
- Extraction will reduce dependence on China for Rare earth metals (95% of REM held by china)
- Give impetus to Research & development
- Give a boost to Blue economy. (₹4000 crore mission to build submersibles for ocean bed exploration)
- Inputs to critical industries including automotives, solar energy, electronics manufacturing etc.

India has agreed to jointly explore the Central Indian Ocean basin as per UNCLOS guidelines with International Seabed Authority.

VisionIAS

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7. What are technical textiles? In view of their significance, discuss the steps taken by the government to promote them in India. **(150 words) 10**

तकनीकी वस्त्र क्या होते हैं? उनके महत्व को देखते हुए भारत में उन्हें बढ़ावा देने के लिए सरकार द्वारा उठाए गए कदमों पर चर्चा कीजिए।

Technical textiles refer to functional fabrics which find application in variety of industries including engineering, automation, personal protection, defense, agriculture, aviation, sports etc.

Significance of Technical textiles.

- COVID-19: Breathable masks & PPE kits
- High Stretch Resistance used in Sportech
- Durable, Bullet proof - Use in defence
- light weight can be used in aviation
- Modified in shape, colour, size texture used in Automation (MobiTech)

Contribution to Indian economy

13% of total textile sector

0.7% of total GDP

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Steps taken

① National mission on Technical Textiles (to capitalise on potential – ensure 15-20% growth in the sector and market capitalisation of 40-50 billion)

COMPONENTS
- Research and Development
- Promotion of market
- Export Development
- Education Research & Skill

② 100% FDI allowed

③ PLI Scheme to boost production –

④ Technotex – global collaborative platform for knowledge & research sharing.

⑤ In Budget 2022, the government announced scheme of ~~Textile~~ Textile Mitras and Textile parks :- This will further give impetus to market led development of technical textiles.

Therefore, Indian economy can benefit from a labour intensive sunrise industry which will create the Brand of Indian Textiles.

VisionIAS

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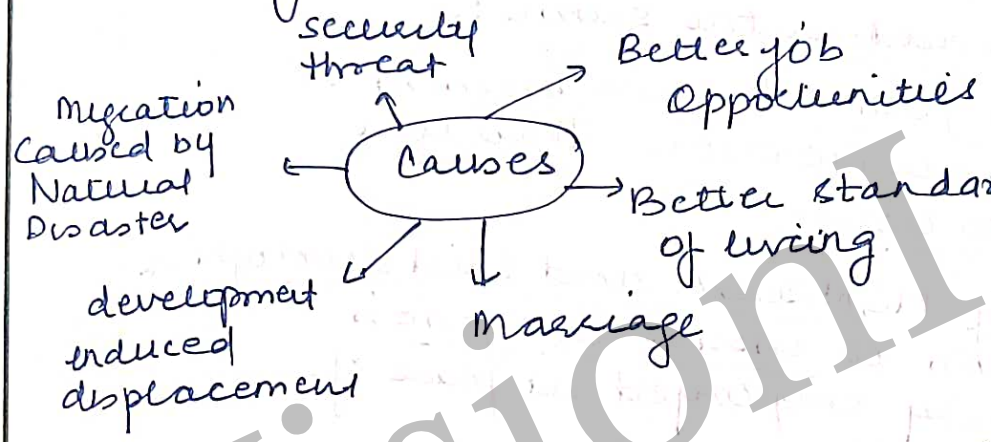
8. Discuss the challenges that internal migration creates for urban governance in India. Also, suggest measures to address the same. **(150 words) 10**

भारत में आंतरिक प्रवासन द्वारा शहरी शासन के समक्ष उत्पन्न चुनौतियों की विवेचना कीजिए। साथ ही, इससे निपटने के उपायों का भी सुझाव दीजिए।

As per the census of 2011, the number of internal migrants in India is about 450 million. ~~Ato~~ Internal Migration is usually done to :-



However, Internal migration creates the following challenges

① For the Destination state

↳ Competition for limited economic resource

↳ change in population demography (eg Tripura's population change due to migration of Bengali's)

↳ Creates insecurity among native population - manifest in violence towards migrants (eg Marathi sentiment against UP migrant)

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↳ Lead to formation of slums and lack of basic facilities
↳ led to increased crime, theft, robbery, rapes (due to cultural shock)

(2) For source state
↳ Loss of economic contribution
↳ increasing number of economic dependants
↳ feminisation of workforce

Measures to address the same :-
(1) Smart & planned development - buffer space creation through satellite cities
(2) Increasing MGNREGA and skill development allocation to ensure everyone is productively employed at place of residence
(3) Goverment steps taken
- National smart cities mission (planned cities)
- AMRUT, HRIDAY for retrofitting & redevelopment
- PM Awas yojana for slum redevelopment
- ONORC: One nation one Ration Card
- PM-Rurban Mission, DAY-NLRUM: strengthen rural areas to plug urban migration

Thus, migration needs to be planned, a matter of choice rather than compulsion

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9. Discuss the various opportunities and challenges posed by globalization on working women in India. (150 words) 10

भारत में कामकाजी महिलाओं के लिए वैश्वीकरण द्वारा उत्पन्न विभिन्न अवसरों और चुनौतियों पर चर्चा कीजिए।

Globalisation is the integration of world with similar set of values of individualism, technology advancement, modernisation and interdependence.

Opening of India in 1991 to the wave of globalisation has led to various opportunities and challenges for Indian working women:-

OPPORTUNITIES

① Increased opportunities for employment in private sector companies, startups, multinational companies
(eg 190 (out of every 1000) managerial positions held by woman)

② Sense of independence and autonomy

③ Greater choice of dressing, leisure activities (social media, netflix) and other stress relieving (spa) avenues

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(4) Improved opportunities to work from home through telecommunication facility of zoom and webex meetings

(5) Access to courses of foreign universities for refresher training & PhD courses.

However, this has also created certain

Challenges

(1) Low wage/self employed women workers ~~is~~ fisherwomen, street vendors & vegetable sellers facing stiff competition from e-commerce portals like Bluggy Instamart, Bigbasket

(2) Domestic workers replaced by Urban Company services

(3) Growing informalisation of jobs

(4) Double burden of jobs with unpaid care work

(5) Creation & Aggravation of inequality

Wayforward
- → Provision of social security nets for working women in informal sections
- → Countering glass ceiling, motherhood penalty with affirmative corporate efforts

VisionIAS

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(इस भाग में कुछ ना लिखें)

10. Discuss the rationale behind anti-conversion laws in India. Also, state the concerns that have been raised with regard to these laws.

(150 words) 10

भारत में धर्मांतरण विरोधी कानूनों के पीछे निहित तर्कों पर चर्चा कीजिए। साथ ही, इन कानूनों के संबंध में व्यक्त चिंताओं का भी उल्लेख कीजिए।

Anticonversion laws in India seek to punish religious conversions by way of force, undue influence, coercion or use of matrimonial alliance.

Rationale behind Anti-conversion law

1. Article 25 dealing with religious freedom doesnot allow proselytising
2. Attempt to protect poor and vulnerable from conversion attempts using enticement through benefits etc.
3. Curb religious fundamentalism & consequent security threats
4. Curb fraudulent marriages and misrepresentation of religion and consequent forced conversions.

In this regard, various governments like Haryana, Uttar Pradesh, Karnataka have

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passed various anticonversion laws:-

However the following are concerns raised in this regard:-

1. Vague definition of terms of - coercion, undue influence, misrepresentation
2. Can be misused against interfaith marriages to target religious minorities (eg Hadiya case)
3. Antithetical to concept of secularism & non interference of state in religion matters of individuals
4. Against right to privacy (K.S Puttaswamy judgement) (Religion is private matter)
5. Against right to choice (SC Hadiya Judgement) (Right to marry partner of own choice)

Way Forward
- → Delineation of specific meaning to vague provisions
- → Case by case basis trial so that right to freedom is balanced with right to choice

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11. Central Asian contacts had a profound political and cultural impact on India in ancient times. Discuss. (250 words) 15

प्राचीन काल में मध्य एशियाई संपर्कों का भारत पर गहरा राजनीतिक और सांस्कृतिक प्रभाव पड़ा है। विवेचना कीजिए।

Absence of the strong mauryan empire led to incursions by Indo Greeks, Sakas, Parthians and Kushans from central asia which impacted the political cultural & social life in ancient times.

INDO greeks (Melind/ Meander) — Sakas (Rudradaman) — Parthians (Gondophernes) — Kushans (Kanishka)

Impact

① POLITY — Idea of divine kinship propagated
- Kushans called sons of god.
- Indo greeks introduced MILITARY GOVERNORSHIP/ SATRAPS

Empire was divided into various satrapies and each placed under appointed military governorship

VisionIAS

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(2) SOCIETY – Settled in India
– called themselves Kshatriyas
– indianised
– Increased societal integration

(3) RELIGION – Milind adopted Buddhism

– Kanishka organised 4th buddhist council
– gave rise to Mahayana Buddhism which made buddhism inclusive

(4) Trade – Direct contact between India & central Asia

Kushanas Controlled the silk route

– Kushans also promoted Agriculture
– Indo greeks introduced first gold coins

(5) Military – Popularised cavalry
– Use of reins, saddles
– boots & better gear

(6) Art and Architecture

VisionIAS

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a) Pottery - introduced redware pottery
- constructed brickwalls from burnt bricks.

b) Stupas - Bharut - railings
- Sanchi - enlarged to twice size.
- Amravati & Nagarjunkonda

c) Patronised 3 schools of sculptures - The three mains schools included Gandhara School of Art;
Mathura School of Art.
Amravati School of Art.

d) Literature and learning - Patronised Sanskrit literature and kavya style
- creative writers like Asvaghosha
- Important books like Mahavastu & Divyadana

e) Science & Technology - Growth of astrology & astronomy, medicine, botany & chemistry.

Thus, cultural linkages with central Asian are evident even now.

VisionIAS

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12. Governance, during the British rule, was a means of exploitation of India rather than a vehicle of public welfare. Discuss. (250 words) 15

ब्रिटिश राज के दौरान शासन (गवर्नेंस), लोक कल्याण के एक माध्यम के बजाय भारत के शोषण का एक साधन था। विवेचना कीजिए।

British governance was borne out of the requirements of colonialism, imperialism and finding suitable market for exploitative capitalism rather than genuine welfare of its subjects.

EXPLOITATION OF INDIA THROUGH BRITISH GOVERNANCE :-

① Policy of Mercantalism of EIC
- State control over resources
- political control over territories

enabled them to buy cheaper goods with revenue collected from Dwaniyrights and export for higher price

② Policy of exploitative Capitalism
- India became market for british goods
- Cheaper + Abundant supply ruined the Traditional industries which

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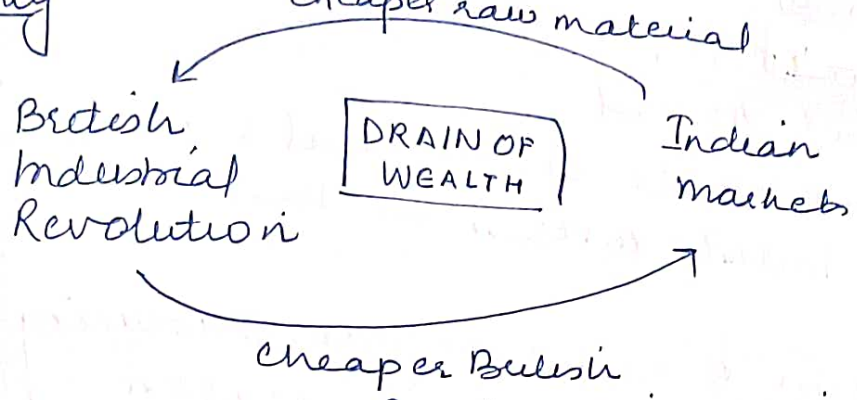
marginalised traditional artisans, led to wide scale unemployment and poverty



③ Finance Capitalism

ⓐ Increase in investments in assets like railways (not for transport/welfare of people but used for goods transportation)

ⓑ Drain of resources through high profits & dividends on investments made

④ Agricultural policies

ⓐ Forced people to grow indigo, tea plantation, rubber, sugarcane as cash crops lead to scarcity of food crops → led to frequent famines.

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(5) Other policies like "DIVIDE and RULE"

= formation of Muslim league
= Bengal Partition
= Communal Award
= lead to vast scale communal roots & extended British interest in India.

(6) Delegation of non revenue producing subjects like education, health and sanitation to local government not for betterment of people but due to neglect of these areas.

Thus British rule in India led to deindustrialisation, ruralisation commercialisation and stagnation of agriculture all in the name of White's man Burden

VisionIAS

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(इस भाग में कुछ ना लिखें)

13. Discuss how India successfully dealt with the sensitive issue of language, which had the potential of threatening national unity in the post-independence period. (250 words) 15

चर्चा कीजिए कि भारत ने भाषा के संवेदनशील मुद्दे का, जिसमें स्वातंत्र्योत्तर अवधि में राष्ट्रीय एकता के समक्ष खतरा उत्पन्न करने की क्षमता थी, किस प्रकार सफलतापूर्वक समाधान किया।

India on the eve of independence, was a cumilation of 585 princely states and 17 britsh provinces, each having own culture, rule and language

It had to deal with 2 issues related to language:-

↳ Declaration of an official language
↳ Linguistic reorganisation of states

OFFICIAL LANGUAGE ISSUE)

- Need for developing genius in own language and shredding foreign language
- No consensus on national language (South Indian states against Hindi being national language)

VisionIAS

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- Through Official language Act of 1965, Hindi made official language, English permitted be continued (even after 15 years) to give adequate space to sentiments of southern states.

- Apart from above, India recognised 22 languages (8th schedule) and has worked towards 3 language formula to ensure national integrity.

LINGUISTIC REORGANISATION OF STATES

- Initially scorned upon due to creation of linguistic rivalry & chauvinism in nation who had just gone through partition

- But due to increasing protest & self immolation of Potti Sriramulu Telugu speaking Andhra Pradesh created.

VisionIAS

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- Although Justice Dhar commission and JVP committee had advised against creation of linguistic states, yet States Reorganisation Commission recommended states to be reorganised on basis of linguistic lines and then on basis of administrative convinience.

Consequences
- → did not hamper federal structure, but helped in national integration
- → Political power now open to other than english speaking elite (Vent for grievance)
- → Acceptance of diversity
- → Filip to regional languges

Thus, creation of states with linguistic consideration has led to better administration of homogeneous political units.

Vision IAS

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14. Bring out the factors, which led to decolonisation after the Second World War. Also, discuss the role played by India in this regard. **(250 words) 15**
उन कारकों का उल्लेख कीजिए, जिनके चलते द्वितीय विश्व युद्ध के बाद विउपनिवेशीकरण हुआ। साथ ही, इस संबंध में भारत द्वारा निभाई गई भूमिका की भी विवेचना कीजिए।

The second world war change the political & economic power games in the world which eventually led to colonies coming out of clutches of colonisers.

About 3 dozen asian and african countries were decolonised after the second world war.

FACTORS

① The conquest of south east colonies & China by a small power like Japan, questioned the invincibility of the European empire.

② Treatment meted by the native population when the British left them be in face of Japanese invasion strengthened the anti-

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colonial resistance

(3) Due to huge finances incurred during the war, Britain was no more an economic powerhouse

(4) USA emerged as the most powerful nation after the war because it had capitalised on the opportunity of providing arms & ammunition to fighting countries and thus was pressurising it allies to grant freedom to its colonies.
(Eg:- Winston Churchill's insistence on decolonised world)

ROLE PLAYED BY INDIA IN THIS REGARD

(1) Refusal of congress to support war efforts if no provision of independence after war
(Rejection of August offer, Cripps mission)

(2) Resistance through Individual Satyagrah, and Quit India movement

(3) The impact created by INA trials which led to Royal Indian Mutiny

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had a paralysing effect on colonial dominance.

(4) India's international efforts including being the torch bearer of Non-Align movement, conferences like Asian Relations Conference, Badung Afro Asian conference, Conference against Dutch aggression in Indonesia and Panchsheel treaty all advocated decolonialisation and mutual respect for territorial integrity.

Thus, being a colonised country itself. India could unshackle from its past to shoulder the greater role of advocate for decolonialisation.

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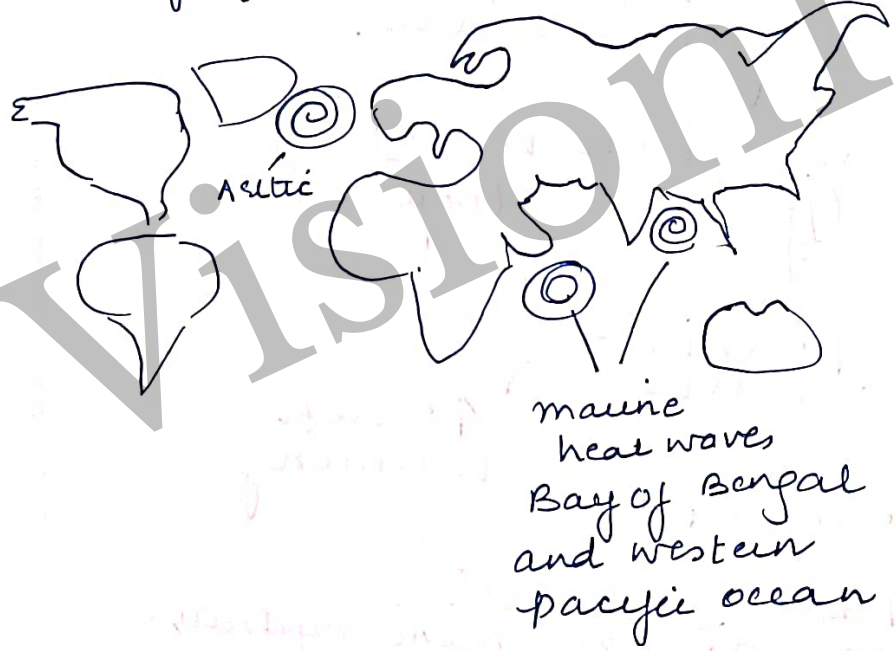
15. What are Marine Heat Waves (MHW)? Identify the causes of their formation and discuss their consequences for India. **(250 words) 15**

समुद्री ग्रीष्म लहरें (MHW) क्या हैं? उनके निर्माण के कारणों की पहचान कीजिए और भारत के लिए उनके परिणामों की विवेचना कीजिए।

Marine Heat waves are abnormally higher temperature over sea surfaces than surrounding areas for a specific period of time.

causes of formation



① IPCC reports states that major cause of marine heatwaves is the increasing temperatures due to anthropogenic activities which emit

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GHG's and increase absorption of solar insolation.

(eg) 1.5 - 2°C increase in world temperature would cause a 1° - 2°C increase in marine temperatures.

(2) Ocean currents also create stagnant zones of hotwater which lead to increase in heatwaves

(3) Winds often diffuse / strengthen the effects of heatwaves.

(4) Increasing ocean warming creates a feedback loop

↑ Marine waves → ↑ ocean warming → destabilises methane hydrates (CH_4) → ↑ CH_4 emission → ↑ greenhouse effect → ↑ Marine waves

Consequences for India

(1) Increases unpredictable events and disasters like cyclones, Tsunamis

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(2) Increase in ocean warming would impact marine habitats of fishes which would impact livelihood of farmers and affect blue economy

(3) Coastal Areas would suffer from double whammy of marine & urban heatwaves

(4) Impacts indian monsoon = may cause cloud bursts / extreme droughts

(5) Makes marine surveillance difficult (thus increases security threat

(6) makes weather forecasting difficult (eg Recent report by IMD says that ↑climate change makes weather forecasting inaccurate)

Way forward

- Use of emerging tech like AI, supercomputers to create predictive weather forecasting models
- Adoption of coastal Regulation Zone guidelines to reduce carbon footprint of coastal cities - to not aggravate marine heat waves.

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16. What are the geo-climatic conditions required for oil palm cultivation? Do you agree with the view that India should promote its large-scale cultivation to reduce import dependency? **(250 words) 15**

ऑयल पाम (ताड़ के तेल) की खेती के लिए आवश्यक भू-जलवायविक दशाएं क्या हैं? क्या आप इस विचार से सहमत हैं कि आयात निर्भरता कम करने के लिए भारत को इसकी बड़े पैमाने पर खेती को बढ़ावा देना चाहिए?

India imports about 80% of its vegetable oil requirement, with 55% being oil palm.

Oil palm is a tropical crop which contains oil in the kernel inside a hard fibrous shell like structure

Geoclimatic conditions required for oil palm cultivation :-

↳ High temperature
Maximum 28°-35°C
Minimum 22°-24°C

↳ High rainfall = 250-400 cm
↳ Presence of large swathes of land
↳ cheap labour - oil has to be manually extracted through huge rotating churners
↳ Presence of sea breeze's moderating effect

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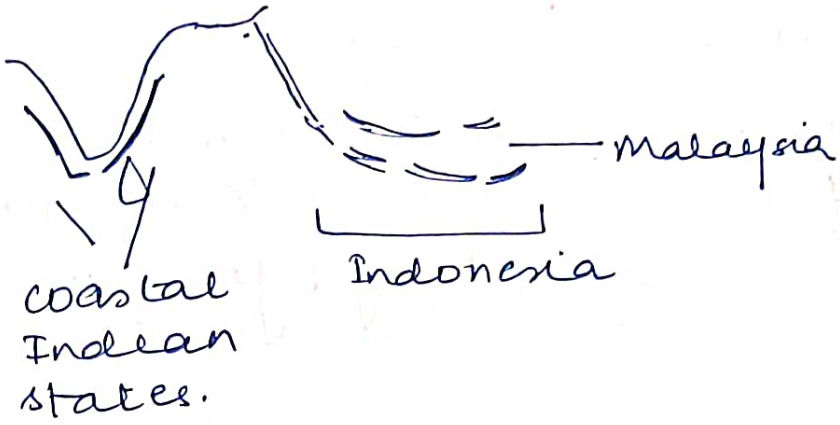
Therefore Palm Oil ~~find~~ found mainly in



Promotion of Large scale cultivation to reduce import dependency

① According to the National Mission for oil palm production, the Indian government seeks to bring 11 lakh hectare of land under oil palm production

② Focus areas :- North East & Andaman & Nicobar Islands

Concerns

↳ Oil palm is an invasive specie (may disrupt the biodiversity in the area it is planted)

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↳ May create problems of land use change and acquisition of Tribal land (Resettlement issues)

↳ Oil palm also requires huge tracts of farm land so small & marginal farmers maynot benefit from the same

↳ The provision of MSP for fresh fruit bunches of oil palm is also not certain

Way forward

- → Adequate Rehabilitation and compensation of tribals;
- → production only to be conducted post EIA impact analysis
- → Intensifying and yeild improvement in coastal states
- → Production of sustainable alternatives like OILSEEDS for oil production.

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17. In view of the changes witnessed in the state of Himalayan cryosphere, discuss the implications for India's water security. (250 words) 15

हिमालयी क्रायोस्फीयर (हिमांक-मंडल) की स्थिति में देखे गए परिवर्तनों को ध्यान में रखते हुए, भारत की जल सुरक्षा के लिए इसके निहितार्थों की विवेचना कीजिए।

According to the 6th IPCC report on Impact of climate on Oceans & cryosphere, the himalayan cryosphere is vulnerable to increased temperature changes & glacier destabilisation

Changes in Himalayan Cryosphere

- shorter winters and warmer
- Refreezing of glaciers
- Retreating glaciers
- Reducing albedo effect.
- Thawing of permafrost

Implications of cryosphere changes for India's water security

① 1.3 billion people depend directly

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on Hindukush Himalayan Ranges (HKH) for irrigation drinking water and power (ORF)

(2) Destabilised Himalayan cryosphere would lead to increased instances of floods and droughts which would jeopardise the drinking water security of perennial rivers

(3) Due to receating glaciers, there is possibility of floods in northern plains due to excessive river run off which would cause losses to economic livelihood and marine habitat

(4) Thawing of permafrost would lead to runoff of chemicals like DDT, soot in rivers which would jeopardise agricultural water security & irrigation

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(4) Reduction in river water amount during lean seasons will impair the hydropower potential of himalayan region.

(5) Reducing albedo creates a positive feedback effect

Reduced albedo due to deposits of soot, black carbon → ↑melting of ice → Lack of glacial refreezing → Reduced albedo

Way forward

- National Action plan for conservation of himalayan ecosystem as a part of (NACPP) would ensure coordination among various stakeholders
- Monitoring economic activity in HKH
- Mandatory EIA for all projects impacting Himalayan ecosystem

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18. Ocean warming, ocean acidification and ocean deoxygenation are often referred to as the 'deadly trio' for marine life. Discuss. (250 words) 15

महासागरीय तापन, महासागरीय अम्लीकरण और महासागरीय विऑक्सीकरण को प्रायः समुद्री जीवन के लिए 'घातक त्रयी' के रूप में संदर्भित किया जाता है। विवेचना कीजिए।

Ocean warming, ocean Acidification and Ocean deoxygenation operate in a loop to reinforce each other, this spells catastrophe for marine life of the region.

Ocean warming → Ocean Deoxygenation → Release of (CH_4) → stratification of ocean Destabilised the Ocean bed & methane (CH_4) hydrates → Ocean acidification

Ocean warming → Degassification of O_2 → increase in absorption potential of CO_2 → Ocean acidification

Impact of the deadly trio on the marine life :-

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① Ocean warming

↳ causes thermal shocks which may be beyond coping capacity of marine life.

(eg. In May 2020, 85% of coral reefs in Gulf of mannar were bleached due to excessive marine heatwaves)

↳ Ocean warming may lead to migration of species to colder climates - impacting livelihoods of fishermen ⇒

(eg. Deep sea fishing adopted by Tamil Nadu fishermen due to lack of fishes)

② ~~Oxygen~~ Ocean Acidification

↳ caused by oil spills, excessive nutrient runoff to ocean and increase of GHG in atmosphere.

↳ May effects spawning habits - change in reproductive cycle of

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marine biodiversity

↳ Excessive acidification may lead to saturation & impair ocean's ability to act as natural carbon sinks.

③ Ocean Deoxygenation

↳ Increased Chemical & Biological oxygen demand (COD+BOD)

↳ excessive eutrophication causes nutrient deficiency and death of marine life

Wayforward

→ International Collaboration (like Beyond National Jurisdiction Biodiversity Treaty)

→ Sustainable Blue economy – sustainable fishing practices

→ Reducing carbon footprint, Beach cleaning, reducing GHG emission & plastic use.

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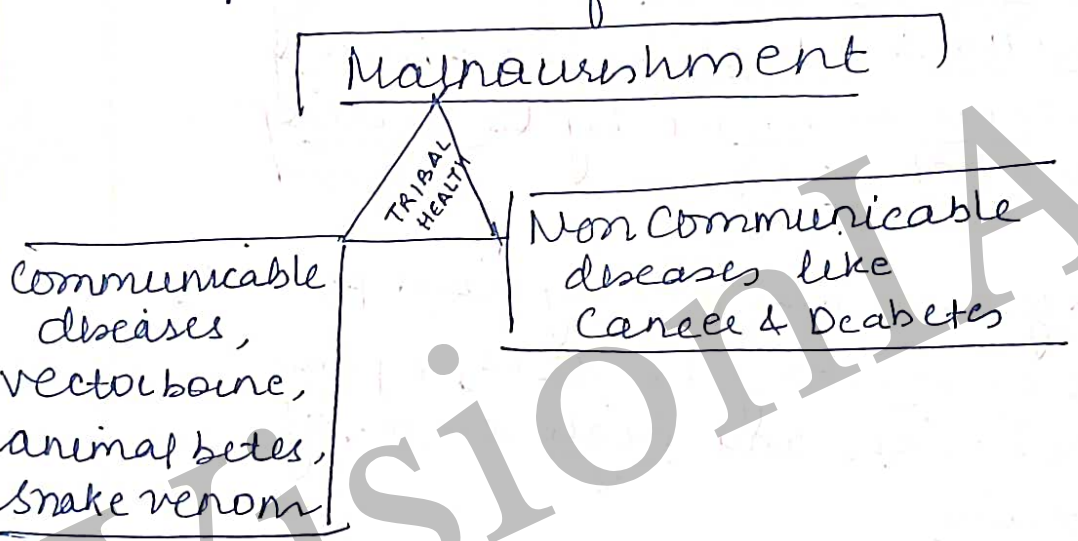
19. Tribals in India continue to face myriad challenges with regard to healthcare. Discuss the issues faced by them in this context and suggest remedial measures. **(250 words) 15**

भारत में आदिवासियों को स्वास्थ्य देखभाल के संबंध में निरंतर अनगिनत चुनौतियों का सामना करना पड़ रहा है। इस संदर्भ में, उनके द्वारा सामना किए जाने वाले मुद्दों की विवेचना कीजिए एवं उपचारात्मक उपायों का सुझाव दीजिए।

About 8.6% of India's population consists of tribals who suffer from the Triple burden of :-



Issues faced by tribals in lack of adequate healthcare :-

(1) Lack of institutional healthcare facilities like Primary healthcentres, hospitals in Tribal areas.

(2) Reluctance of doctors to serve in tribal areas.

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③ Lack of infrastructure and connectivity to tertiary/secondary healthcare facilities in bigger towns & cities

④ Uncertainity of diseases due to varied terrain, primitive practices – which are not easily diagnosed

⑤ Dangerous practices borne out of suspicion & ritualism (eg- curing malnourishment by branding with hot iron)

⑥ Lack of awareness among tribal population

⑦ Lack of sanitary practices, open defecation and high cases of infection

⑧ Addictions, drug abuse, alcohol consumption (70% tribal men tobacco users (55% non tribal))

Recommendations

① The focus of government should be to provide adequate health infrastructure,

↳ Opening medical colleges in Tribal districts (eg- As done in

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Aspirational District programme)

- ↳ Incentivising hospitals in scheduled areas
  ↳ Mandating a minimum time period to be served by doctors in ~~tribal~~ Tribal areas to gain license

(2) Schemes like Aarogya mitra and AYUSH grid to combine tribal indigeneous knowledge with modern science

(3) Increasing ASHA workers in tribal areas

(4) Customising programmes like mid day meals, PM-POSHAN to suit dietary requirements in PESA Areas.

(5) Monitoring through tools like ST Health card, Tribal Health Index

(6) Increasing awareness & functional health literacy in Tribal Areas (eg- Mandla, MP, first tribal village to have 100% health literacy)

(7) Special emphasis on women & girl child development (eg- Distribution of sanitary pads to end period poverty among tribal women)

(8)

Thus, tribal health would ensure India meeting its Universal health coverage goals for Sabka Saath, Sabka Vikaas

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20. Reservation for women perpetuates a "proxy culture" as seen in the phenomenon of "sarpanch patis". In this context, discuss whether reservation can address the issue of poor participation of women in Indian politics. (250 words) 15

महिलाओं के लिए आरक्षण एक "प्रॉक्सी कल्चर" को बनाए रखता है जैसा कि "सरपंच पति" की परिघटना में देखा जाता है। इस संदर्भ में, चर्चा कीजिए कि क्या आरक्षण भारतीय राजनीति में महिलाओं की निम्न भागीदारी के मुद्दे का समाधान कर सकता है।

73rd ammendment Act. mandated reservation of one third seats in panchayats for women. such was its impact, that actual women participation in PRI political respresentation is more than 40%. (8-10% compared to central & state level representation)

However, this reservation has also led to creation of Sarpanch Pati's because :-

1. Ingrained Patriarchy in Indian Society
2. Lack of exposure of women in political representation
3. Illiteracy
4. Social stigma/norms delegating women to household chores
5. Practices of Purdah

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Although in the first instance the reservation may seem to be tokenistic, giving husband of women sarpanches opportunity to yeild real power,

Yet, Reservation can address the problem of poor participation of women in Indian poutics

1. Institutionalises equality in membership i.e states can be penalised for not providing reservation
2. Enables exposure to overwise home relegated women
3. Women have been seen as easily approachable and tend to spend more on social development when compared to men (Eg: Health education)
4. Reservation can provide training ground for political empowerment

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However, reservation is necessary but not a sufficient condition.

There is a need to :-

1. Women Specific training with women Role models (eg Chavi Rajawat)
2. Capitalise on potential of women SHG for political training (eg kudumbshree)
3. Gender sensitisation & behaviour Training through making changes in name of post (Chairman → gender neutral Chairperson)
4. Incentorising women leadership & partnership by sharing stories of best practices (eg MAVIM, Lijjat Udyog)

Thus, when the only indicator that India fares well in Gender Equality Report is political empowerment, it is time to substancially lead the way for women led development.

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GENERAL STUDIES (TEST CODE : 1836)

Name of Candidate	NEEPA MANOCHA		
Medium Eng./Hindi	ENGLISH	Registration Number	1253004
Center	OLD RAJINDER NAGAR	Date	19/08/2022

INDEX TABLE

Q. No.	Maximum Marks	Marks Obtained
1	10	
2	10	
3	10	
4	10	
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6	10	
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18	15	
19	15	
20	15	

Total Marks Obtained:

Remarks:

INSTRUCTIONS

1. Do furnish the appropriate details in the answer sheet (viz. Name, Registration Number and Test Code).
   उत्तर पुस्तिका में सूचनाएं भरना आवश्यक है (नाम, प्रश्न–पत्र कोड, विद्यार्थी क्रमांक आदि)।
2. There are **TWENTY** questions printed in **ENGLISH & HINDI**
   इसमें बीस प्रश्न हैं अंग्रेजी और हिन्दी में छपे हैं।
3. **All questions are compulsory.**
   सभी प्रश्न अनिवार्य हैं।
4. The number of marks carried by a question/part is indicated against it.
   प्रत्येक प्रश्न/भाग के अंक उसके सामने दिए गए हैं।
5. Answers must be written in the medium authorized in the Admission Certificate, which must be stated clearly on the cover of this Question-Cum-Answer (QCA) Booklet in the space provided. No marks will be given for answers written in medium other that the authorized one.
   प्रश्नों के उत्तर उसी माध्यम में लिखे जाने चाहिए जिसका उल्लेख आपके प्रवेश पत्र में किया गया है और उस माध्यम का स्पष्ट उल्लेख प्रश्न–सह–उत्तर (क्यूसीए) पुस्तिका के मुख्य पृष्ठ पर अंकित निर्दिष्ट स्थान पर किया जाना चाहिए। उल्लिखित माध्यम के अतिरिक्त अन्य किसी माध्यम में लिए गए उत्तर पर कोई अंक नहीं मिलेंगे।
6. Word limit in questions, if specified, should be adhered to.
   प्रश्नों में शब्द सीमा, जहाँ विनिर्दिष्ट है, का अनुसरण किया जाना चाहिए।
7. Any page or portion of the page left blank in the Question-Cum-Answer Booklet must be clearly struck off.
   उत्तर पुस्तिका में खाली छोड़ा हुआ पृष्ठ या उसके अंश को स्पष्ट रूप से काटा जाना चाहिए।

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EVALUATION INDICATORS

1. Contextual Competence
2. Content Competence
3. Language Competence
4. Introduction Competence
5. Structure - Presentation Competence
6. Conclusion Competence

Overall Macro Comments / feedback / suggestions on Answer Booklet:

1.

2.

3.

4.

5.

6.

All the Best

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1. The PM-AASHA scheme is aimed at improving procurement mechanism as well as ensuring remunerative prices for farmers. In this context, highlight the various components of the scheme and discuss the concerns associated with it. **(150 words) 10**

पीएम-आशा योजना का उद्देश्य खरीद तंत्र में सुधार के साथ-साथ किसानों के लिए लाभकारी मूल्य सुनिश्चित करना है। इस संदर्भ में, योजना के विभिन्न घटकों को रेखांकित कीजिए तथा इससे जुड़ी चिंताओं पर चर्चा कीजिए।

The PM-AASHA scheme was introduced to tackle the issues of a skewed procurement mechanism and ensure security of non-paddy & wheat growing farmers.

Need → crop diversification
Need → Bring down the cost of centralised procurement
Need → Encouragement of oilseeds, pulses production thus ensuring nutritional security.

components of the scheme :-

① Price support system

↳ To counter excessive production of wheat & rice and no procurement of other crops

↳ Provisions for procurement of → Oilseeds, Copra, Pulses.

② Price deficiency system

↳ Provision of direct payment of deficiency between MSP of oilseeds, copra & pulses and actual sale price in open market

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↳ Defeciency given as subsidy - directly credited through DBT
↳ Avoid costs of transport, storage associated with govt procurement

(3) Pilot of ~~Pilot~~ Private stockist and storage scheme
↳ Private individuals to procure at MSP on behalf of government.

Although well intentioned it faces certain concerns :-

Concerns
- On ground Procurement of crops inadequate
- No guidelines for private procurement issued
- Regional imbalance of procurement
- Mandi capacity inadequate and unsuitable for pulses & oilseeds
- Lack of Drying yards, weighing machines and cold storage facilities

Way forward
- Imbibing the efficiency of process from parent scheme of Bhavantar Bhugtan Yojana (MP)
- White papers and specific guidelines for private procurement

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2. Explaining the concept of blended finance, discuss the role it can play in mobilizing capital for infrastructure development in developing countries like India.

(150 words) 10

मिश्रित वित्त की अवधारणा की व्याख्या करते हुए, भारत जैसे विकासशील देशों में अवसंरचना विकास हेतु पूंजी जुटाने में इसकी भूमिका पर चर्चा कीजिए।

Blended finance refers to combination of concessional and commercial finance wherein government financing crowds in private financing for a social/economical cause

BLENDED FINANCE

on completion of social cause/ attainment of predetermined threshold, returns offered at market rate to private companies & at concessional rate to governmental bodies.

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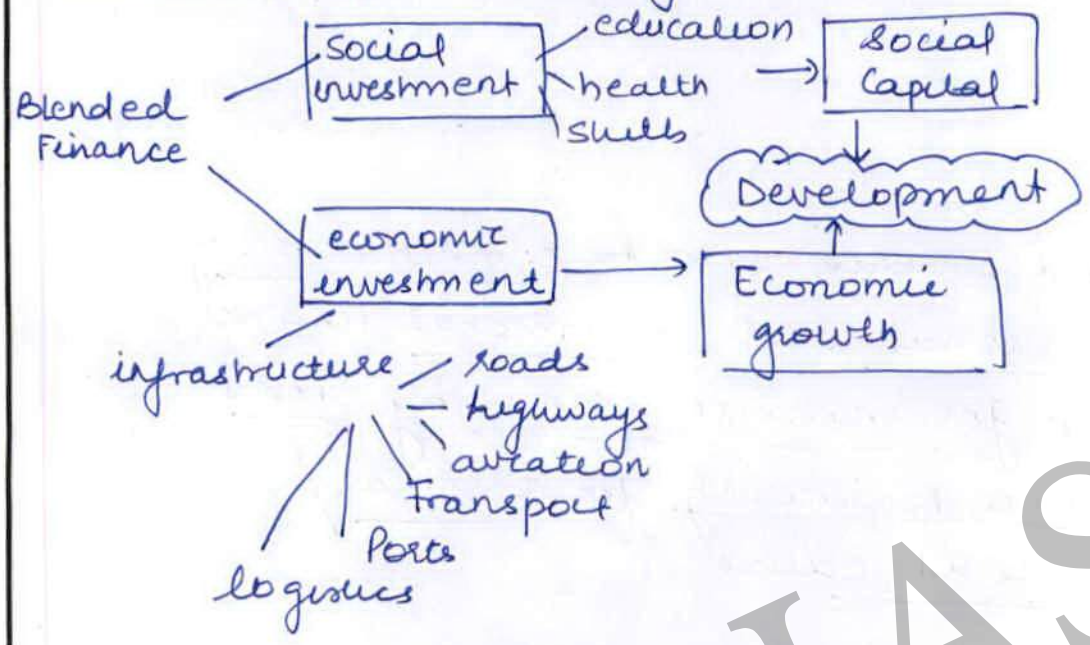
Role it can play in mobilising development



For eg:- NITI Aayog's report on Blended finance in healthcare points out, that :-

1) Blended finance can encourage private participation in projects with higher gestation periods & intensive capital requirement
2) Promotes risk sharing
3) Reduces financial burden on exchequer
4) Precursor to synergistic PPP projects
5) Unlocks the real values of assets, leads to efficient resource allocation.

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

3. Discuss the challenges faced in the revival and revamp of dry ports in India and state the measures that can be adopted in this regard.

(150 words) 10

भारत में शुष्क पत्तनों (ड्राई पोर्ट्स) के पुनरुद्धार और सुधार में आने वाली चुनौतियों पर चर्चा कीजिए तथा इस संबंध में अपनाए जाने वाले उपायों का सुझाव दीजिए।

Dryport refers to the inland container depots which reduce the workload and congestion at major ports by providing space & time utility for cargo storage.

Dryports are a crucial link to port development however out of 300+ dryport only about half of them are operational.

Thus there is a need of revival & revamp of dryports. The following challenges are faced in the same:-

Challenges

① Requirement of large swathes of land (problems in land acquisitions, displacement issues)

② Lack of adequate finance due to hesitancy of private sector to participate

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

③ Capacity limitations :- Tedious bundling & unbundling provisions due to lack of containers (India had to import containeds in year 2021)

④ Huge logistics costs (14% of GDP) and custom department's redtapism and delay in clearances.

Measures that can be adopted in this regard

→ Sagarmala Project (for Port led infrastructure development)

→ Hub and spokes model to reduce logistics costs

→ Single window custom clearance system and digital invoicing on lines of e-way bill & PARIVESH portal

→ New Major Port Authorities Bill can ~~provi~~ provide professionalism & autonomy in port development

Thus, the new programmes like PM-GATI SHAKTI which focusses on economic infrastructure development can include revamping of Dryports for efficient trade & transport in India.

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

4. Monoculture is one of the major threats to ensuring food security and sustainability of Indian agriculture. Discuss. **(150 words) 10**
एकल कृषि (मोनोकल्चर) खाद्य सुरक्षा और भारतीय कृषि की संधारणीयता सुनिश्चित करने के समक्ष विद्यमान प्रमुख खतरों में से एक है। चर्चा कीजिए।

Monoculture refers to growing a single crop in the soil over and over each cropping season.

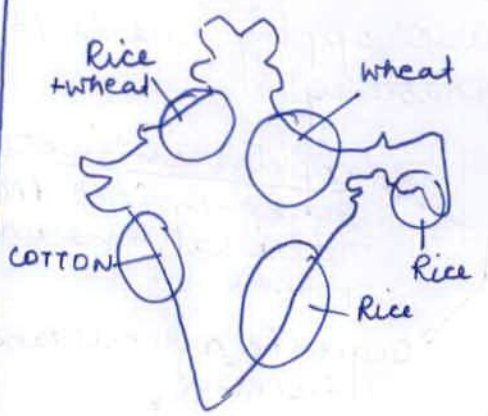
Skewed procurement incentives, imbalances created by green revolution and primitive state of agriculture have led to increased cultivation of rice & wheat in India.

Monoculture is a threat to :-

① Food security
② Preference of farmers to grow the same crop would lead to excesses and deficiencies of nutrients.

eg Excessive Rice and Wheat capacities have lead to micronutrient & protein deficiency (HIDDEN HUNGER) and higher carbohydrate diet which may lead to obesity

MONOCULTURE



VisionIAS

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(b) Excessive production may cause lack of storage facilities which lead to wastage of grains causing shortages.

(c) Excessive production may impair soil fertility which may lead to soil degradation & cause food insecurity

(2) Sustainability

(1) Rice & Wheat production → Lack of Pulses → No natural nitrogen fixation (caused by legumes) → Soil degradation + sustainability impaired

(2) Rice & Wheat are water guzzling crops → dependence of agriculture on groundwater (80%) through canals & tubewell → virtual water trade → Water Scarcity

(3) Rice also produces methane in environment (transplantation)

(4) Stubble burning cause of PM2.5 & PM10 leads to airpollution

Thus monocropping leads to environmental unsustainability

Measures → Crop diversification through schemes like PM-AASHA, national mission on oilseeds & pulses

→ Organic agriculture and natural farming

Thus, multicropping will help to double farmers income.

Don't write anything this margin
(इस भाग में कुछ ना लिखें)

5. While highlighting the impact of single-use plastic on health and the environment, state the recent efforts taken by the government to curb plastic pollution in India. **(150 words) 10**

स्वास्थ्य और पर्यावरण पर एकल-उपयोग वाले प्लास्टिक के प्रभाव को रेखांकित करते हुए, भारत में प्लास्टिक प्रदूषण को रोकने के लिए सरकार द्वारा हाल ही में किए गए प्रयासों का उल्लेख कीजिए।

single use plastic is the globally most produced plastic out of which only 20% is recycled.

Impacts of single use plastic (SUP)

- Health
  - Human health: disruption of endocrine system, cancers, toxicity, hormonal imbalanced
  - Animal health
    - Dangerous to marine health
    - causes entanglement, suffocation, ingestion (eg whale dies of 33 pound plastic on indonesian beach)
- Environment
  - High carbon footprint
  - Huge cause of menace like beach litter, fires at landfills
  - incineration of SUP is carbon intensive
  - leaches groundwater
  - Disintegrates into micro-plastics which is harmful for oceans, air and soil.

VisionIAS

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Efforts taken to curb plastic pollution

1. Banning of production, manufacture, stockpile and sale of single use plastic in certain commodities (straws, earbuds, plastic bags)
2. Community efforts for plastic collection (Eg: Swach Sagar, Surakshit Sagar beach cleaning programmes)
3. Project REPLAN :- Reducing plastic wastes
4. Impetus to circular economy
5. Setting up of waste to energy programme
6. Plastic waste management rules that prescribe extended producer responsibility for end of use life of plastics.

Thus plastic free economy is essential for India's clean, green, & blue economy

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

6. Aapda Mitra – a force of volunteers from across India trained in disaster response – is becoming a game changer in the field of disaster management in the country. Elaborate. **(150 words) 10**
आपदा मित्र-आपदा प्रतिक्रिया हेतु प्रशिक्षित भारत भर के स्वयंसेवकों का एक बल-देश में आपदा प्रबंधन के क्षेत्र में एक गेम चेंजर के रूप में उभर रहा है। सविस्तार वर्णन कीजिए।

Aapda mitra is a cohesive force of volunteers from vulnerable groups (prone to hazards & disasters) that are trained in disaster management.

This has been a game changer in field of COMMUNITY BASED DISASTER MANAGEMENT.

Aapda mitras are involved in:-

1. Acting as Quick Response team to supplement efforts of NDRF
2. Ensuring dissemination of early warning systems and manage evacuations from hazard prone areas.
3. Ensuring rescue of people due to their prior knowledge about affected area.

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

(4) Provision of essential services of food, water, medicines to affected areas.

(5) For eg:- During COVID-19, Aapda mitra handled grain distribution and ensured lockdown was being followed. They also led the immunisation drives

(6) Help in recovery efforts by monitoring physical capital, social conflicts & mental health of victims.

Thus, through their spirit of volunteerism, prior knowledge, resource base and government training Aapda mitras can build COMMUNITY RESILIENCE, prevent disasters and if it happens help to build back better

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

7. Why is the rise in lone wolf attacks considered as a serious challenge for security agencies around the world? Highlight the role of the internet in exacerbating such attacks. **(150 words) 10**

विश्व भर में लोन वुल्फ हमलों में वृद्धि को सुरक्षा एजेंसियों के लिए एक गंभीर चुनौती क्यों माना जाता है? ऐसे हमलों की वृद्धि में इंटरनेट की भूमिका पर प्रकाश डालिए।

Lone wolf attacks refer to attacks by single perpetrators instead of a collaborated attack by a gang of terrorist.

Lone wolf attacks are considered serious challenge for security agencies because:-

1. Difficult to detect due to lack of intelligence gathered through training planning & collaboration calls

2. cannot be prevented due to lack of information on location time and mode of attack

Role of internet in exacerbating such attacks

1. Radicalisation - easy & internet has mass reach

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

② Difficult to distinguish from internet banter :- eg ('clash of ISIS game')

③ Increased exposure to internet gives simplicity to logistics (Eg DIY Bomb kits - Youtube)

Solutions

↳ Deradicalisation
↳ Strict vigilance control
↳ Stronger ammunition & dual use chemical sale laws

Thus, lone wolf attacks can be stopped ~~due~~ using a comprehensive National Counter Terrorism Doctrine

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

8. The fundamental inefficiencies embedded in our military structures and processes are now being addressed through a slew of defence reforms in the country. Discuss. **(150 words) 10**
हमारे सैन्य ढांचे और प्रक्रियाओं में अंतर्निहित मूलभूत अक्षमताओं को अब देश में विभिन्न रक्षा सुधारों के माध्यम से दूर किया जा रहा है। चर्चा कीजिए।

The Indian armed forces and military is suffering from increased technological obsolence of equipment dependence on foreign technology, gender bias and lack of synergies.

Defence Reforms

(1) Mordernisation :- Increased research and academia linkage, lab to lines (Mission Gyan Raksha Shakti) and Defence Industrial corridors

(2) Indigeneousation - Through introduction of negative import list, reservation for MSME's and changes in defence procurement Policy (Indian - Buy, Make)

(3) Professionalism :- Through corporatisation of Ordnance factory Board, increased private sector participation and forming

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Project management units

(4) Exports :- Defence Diplomacy and changes in offset policy & line of credit for defence exports

(5) Inclusive - Through permanent commission to women

(6) Synergy :- Through CDS (Chief of Defence staff) and formation of Theatre commands.

(7) Tech savvy - Agnipath

Hence, the indian armed forces are on path to become upgraded tech enabled and more responsive to emerging threats

VisionIAS

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9. In light of the recent establishment of the WHO Global Centre for Traditional Medicine in India, discuss the advantages and challenges in mainstreaming traditional medicine in the country. **(150 words) 10**

हाल ही में, भारत में डब्ल्यू. एच. ओ. ग्लोबल सेंटर फॉर ट्रेडिशनल मेडिसिन की स्थापना के आलोक में, देश में पारंपरिक चिकित्सा को मुख्यधारा में लाने के लाभों और चुनौतियों पर चर्चा कीजिए।

The culture of traditional medicine in india goes beyond healing, it is a life force and includes sustainability, mental health, lifestyle changes & boosting immunity

Advantages of mainstreaming traditional medicine

① Immunity booster (eg - Ayurvedas Unani medicines)
② Ensure good lifestyle (Eg :- Yoga)
③ Cater to huge demand (Eg WHO estimates 80% of demand for traditional medicine)
④ Ensure research & development and generate awareness in fields of Sowa Rigpa - etc
⑤ Complementing allopathy with no side effects
⑥ Help in formation of human capital.

VisionIAS

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Disadvantages :-

1. No proven benefits :- Considered to be a pseudo science
2. Lack of qualified professional (46% Only qualified - rest quacks)
3. Long time taken for healing
4. Low demand (8.6%) in outpatient care.
5. Difficult to change lifestyle in growing urbanisation

Wayforward
- → Aayush GRID
- → Aayush Ministry mission to be integrated with Aayushman Bharat
- → Traditional Knowledge Digital library strengthened

Thus there is a requirement of cross learning between modern & traditional science of medicine

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

10. Nano Urea Liquid has the potential to transform farming in India and across the world by improving productivity while reducing environmental pollution and input cost. Discuss. **(150 words) 10**

नैनो यूरिया लिक्विड में पर्यावरण प्रदूषण और इनपुट लागत को कम करने के साथ-साथ उत्पादकता में सुधार करके भारत और विश्व भर में कृषि कार्य को रूपांतरित करने की क्षमता है। चर्चा कीजिए।

Due to its higher surface area to volume ratio, nano urea liquid can revamp the farming practices by :-

① Improve Productivity

* Overuse of fertilisers can be avoided (maintain N:P:K ratio to 4:2:1 as compared to present 7:4:1)

* Direct root zone application prevent runoff.

② Reducing pollution

* No leaching of urea to groundwater
* No harmful chemical emissions due to applications

③ Reduce input lost :-

* Effecient & Targetted usage

VisionIAS

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(इस भाग में कुछ ना लिखें)

* No diversion to industrial usage

However
- → Lack of technology (in nascent stage to study impact on crop quality & food security)
- → Finances to fund research, make farmers aware and encourage the switch.

Wayforward
- → Awareness through KVK's
- → Subsidise introduction and usage.
- → Creation of FPO's to enable the switch

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

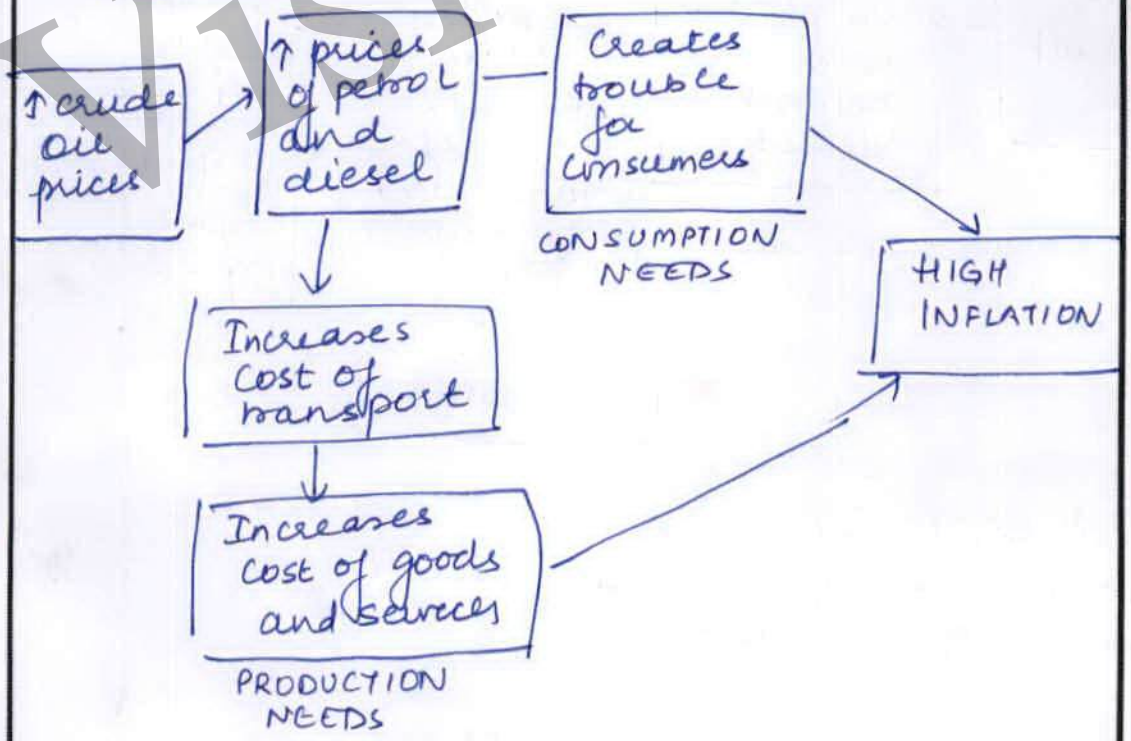
11. Discuss the domino effect of high crude oil prices on the Indian economy. Also, enumerate the measures that India can take in this context.

(250 words) 15

भारतीय अर्थव्यवस्था पर कच्चे तेल की ऊंची कीमतों के डोमिनो प्रभाव की विवेचना कीजिए। साथ ही, भारत द्वारा इस संदर्भ में अपनाए जा सकने वाले उपायों को सूचीबद्ध कीजिए।

India has been witnessing severe current account deficit due to rising crude oil prices caused by geopolitical volatilities including Russia Ukraine War, inhibition of OPEC countries to increase production & scramble for energy resources by europe.

Contagion effect of high crude oil prices in Indian context.



VisionIAS

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Thus, high crude oil prices causes inflation in domestic economy

↑ High crude oil prices → High dependence on imports (80%) → ↑ cost of imports → ↑ current account deficit

↑ in demand for dollar in comparision to rupee → Depreciation of rupee

Thus, high crude oil prices cause depreciation of rupee & High current account deficit

↑ High crude oil prices → No change in government levies on petrol & diesel → Loss of amount of taxes through petrol if government doesnt pass the entire increase burden to consumers → Fiscal space reduced → inability to spend on welfare expenditure

Thus, high crude oil prices also leads to limited fiscal space & decrease in government expenditure

VisionIAS

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Measures that can be taken by India in this regard :-

1. Alternative of buying cheaper oil from Russia (eg. use of VOSTRO Accounts)
2. Building up strategic petroleum reserves for contingencies
3. Use of technologies like Ethanol blending (eg 20% target by 2025), methanol use and carbon alternate fuels like H-CNG etc.
4. Self reliance through "Explore in India" (New India@75 strategy) for oil surveying & extraction in offshore fields
5. Use of open market operations by RBI to ensure stability of Rupee.

Thus, India must ensure resilience through self reliance and strategic investments.

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

12. The consistent high operating ratio of the Indian Railways is indicative of its incapability to generate high operational surplus. Explain the reasons behind this trend. Also, highlight the remedial measures taken by the government in this regard. **(250 words) 15**

भारतीय रेलवे का लगातार उच्च परिचालन अनुपात उच्च परिचालन अधिशेष सृजित करने में असमर्थता का संकेत है। इस प्रवृत्ति हेतु उत्तरदायी कारणों को स्पष्ट कीजिए। साथ ही, इस संबंध में सरकार द्वारा किए गए उपचारात्मक उपायों को रेखांकित कीजिए।

The operating ratio of Indian Railways according to a CAG report was 98.36%. In addition to this, the cumulative losses of railways amount to 28,000 crore.

~~Thus this yes~~

Reasons for inability of railways to generate high operational surplus

① Service motive of railways → (Exemptions for students, disabled, employees etc)

② Cross subsidisation → Fare to Freight ratio of Indian railways is 0.3, this is lesser than many developed countries (Ratio = 1)

③ Cost overruns due to incompleted projects on account of delays in land acquisition & environmental clearances

④ lack of growth in infrastructure - Over past 5 years 200 new trains have been added

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but the tracks have increased only by 12% and most of them are narrow

(5) This leads to accidents (76% caused due to derailment)

(6) Target of protests during (Farmer Agitation, Bihar Railway Recruitment & Agnipath scheme)

(7) Lack of private sector participation

Remedial Measures Taken by government in this regard

(1) Private participation through tejas express and invitation to operate on 109 routes

(2) National Railplan which seeks to increase freight proportion in total revenue from 27% to 45%.

(3) Dedicated freight corridors to ensure seamless cargo movement and WAG 21 engines to ensure speed through transportation of perishable commodities (KISAN RAIL)

VISION IAS

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(4) Infrastructure improvements through change in tracks – (narrow → Broad) and revamping all level railway crossings.

efforts in Budget 2022-23
- → A e-KAVACH – Automated early warning & collision prevention system
- → One Nation, One Product One station – seeks to improve the infrastructure of railway stations

Thus, railways are most treasured assets of the country.

Way forward
- → Behavioural change in protestors – destroying public property causes huge losses to economy
- → Expediting Ahmedabad Mumbai bullet train after feasibility studies.

VisionIAS

Don't write anything this margin
(इस भाग में कुछ ना लिखें)

13. Micro food processing sector is the key driver of growth in the Indian economy as it encourages food processing innovation. In this context, state the challenges faced by the micro food processing sector and discuss how the recent initiatives taken by the government aim to address them.

(250 words) 15

सूक्ष्म खाद्य प्रसंस्करण क्षेत्रक भारतीय अर्थव्यवस्था में संवृद्धि का प्रमुख चालक है क्योंकि यह खाद्य प्रसंस्करण नवाचार को प्रोत्साहित करता है। इस संदर्भ में, सूक्ष्म खाद्य प्रसंस्करण क्षेत्रक द्वारा सामना की जाने वाली चुनौतियों का उल्लेख कीजिए और चर्चा कीजिए कि किस प्रकार सरकार द्वारा हाल ही में प्रारंभ की गई पहलों का उद्देश्य इनका समाधान करना है।

Food processing can enable value addition, export competitiveness reduction of food wastage and doubling farmer income.

Importance of Micro food Processing

- Can curb disguised employment in agricultural sector.
- Flexibility of operation due to small scale
- Can be operated with limited capital.
- Boost to secondary Agriculture.
- Ensure Agricultural export Basket diversification

This would lead to village entrepreneurship and food processing innovation

VisionIAS

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Challenges faced by the micro food processing sector:- (MFP)

① Problems of disaggregation
(Due to their small scale, they encounter problems of lack of marketable surplus)

② Problems of adequate finance for setting up MFP units - due to low credit taking ability & lack of credit worthiness.

③ Market linkages issues
* Lack of transport infrastructure (No provision of cold storage & Reefer vans)
* Lack of Quality certification labs
* Lack of market intelligence

④ Problems of demand
* Lack of awareness about processed food options
* Preference towards natural products

VisionIAS

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Initiatives taken to address these challenges:-

① Pradhan Mantri Formalisation of Microfood processing units - through infrastructure provision, credit facilities etc.

② ~~KIS~~ SAMPADA Yojana ← Cold storage, Mega Food Parks, Backward forward linkages

③ Priority sector lending for food processing industries

④ TOP to TOTAL / Operation Greens :- To increase shelf life of products by increasing food processing component

Thus, best practices of Amul, Lijjat Papad etc can be scaled for ensuring innovation in food processing

VisionIAS

Don't write anything this margin
(इस भाग में कुछ ना लिखें)

14. Despite efforts by successive governments, equitable growth remains elusive and income inequality continues to persist in India. Discuss.

(250 words) 15

क्रमिक सरकारों के प्रयासों के बावजूद, न्यायसंगत विकास दुष्प्राप्य बना हुआ है और भारत में आय असमानता निरंतर बनी हुई है। चर्चा कीजिए।

From various "Garibi hatao" poverty alleviation programmes to targetted and more rights based approaches including Public Distribution of foodgrains through NFSA and MNREGA, india has witnessed several initiatives for inclusive growth.

Yet, equitable growth remains elusive and income inequality continues to persist :-

① According to Oxfam Report

Top 10% own 57% of wealth

Bottom 50% own 13% of wealth

India added 12 billionaires during COVID

STARK INEQUALITY

86% of people experienced a decline in income

concentration of wealth in hands of few → 8.6% projected economic growth yet 25% multidimensionally poor.

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Reasons

① Lack of capability approach

ⓐ High illiteracy (More than 25%), ⓑ low health indicators (highest percentage of wasted, stunted children)

ⓒ lack of nutrition (101st/160 countries in Global Hunger Index)

ⓓ lack of skill formation (only 2.5% population formally trained)

② Lack of opportunity

ⓐ Problem of jobless growth [stagnant manufacturing sector, disguised unemployment in agriculture and low jobs in unskilled service sector]

ⓑ Problem of missing Middle - Drawfism in MSMEs

ⓒ Lack of focus on labour intensive formal industries (85% engaged in lowpaying informal jobs)

③ Governance Lacunaes

↳ corruption
↳ Policy paralysis
↳ Lack of social accountability

VisionIAS

Don't write anything this margin (इस भाग में कुछ ना लिखें)

Solutions

① Focus on capacity building

① Education → Sarva shiksha Abhiyan
→ Vocationalisation of education
→ Competancy based learning

② Health → Universal health coverage
→ (Aayushman Bharat)
→ Provision of social Security Nets

③ Skill Development → Prepare for IR4.0
– PM kaushal vikas Yojana

② Focus on opportunity

① Manufacturing of Make in India
– MSME's
– entrepreneurship
– PLI scheme
– Atmanirbhar Bharat

② Infrastructure development → NIP, NMP, PM Gati Shakti

③ Labour Codes to be implemented

③ Governance Reforms

↳ Use of progressive taxation (redistribution of wealth)
↳ schemes like MGNREGA, PM-KISAN, to recieve greater Budgetary allocation
↳ ensuring social mobility through alternative livelihoods opportunity = NAMASTE

Thus focus of New India should be Sabka Saath Sabka Vikas

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15. Stating the factors that determine the employment situation of an economy in the long-term, discuss the measures that are needed for India to address its unemployment problem. **(250 words) 15**

किसी अर्थव्यवस्था की दीर्घावधि में रोजगार की स्थिति को निर्धारित करने वाले कारकों का उल्लेख करते हुए, उन उपायों की विवेचना कीजिए जो भारत में बेरोजगारी की समस्या के समाधान हेतु आवश्यक हैं।

According to the periodic labourforce survey, the unemployment rate in India is 7.8%. This jobless growth witnessed by India, jeopardised the demographic currency.

Determinants of Employment situation in India :-

① Demographic dividend :- This refers to the population of working age people in total population.

↑ Demographic dividend → ↑ workforce → ↑ consumption
↓ dependants → = ↑ Investment
↑ employment

② Women labourforce :- Proportion of women in workforce (In 2022 → 25% women working)

↑ women labourforce → ↑ investment on social & economic services
↑ employment (social services)

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③ Occupational structure of economy :- presence of a manufacturing base and number of people employed
(eg. Presence of labour intensive industries ↑ employment)

④ Skill capital (Presence of technical & soft skills required to do the job)
eg. Skill Requirement for IR 4.0

Other than the above, government policies including
↳ Budgetary allocations to employment gaurentee schemes (eg. MGNREGA)
↳ Attitude towards foreign investment
↳ Taxes on startups
↳ Financial enablement of entrepreneurship
also determine the level of employment

Measures required to deal with the issue of unemployment in India

① Solving presence of MSME drawform & missing middle through MSME involvement in defence production, labour reforms, exclusive government procurement etc.

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(2) Skill development through programmes like PM kaushal Vikas yojana,

(3) Agricultural diversification to absorb disguised unemployment through food processing industries, secondary agriculture

(4) Encouraging foreign and private investments in PLI scheme, PM-GATI Shakti

(5) Providing financial assistance for self employment through MUDRA-Startup, Standup India

(6) Converting SEZ into employment enclaves through DESH Bill, 2022

(7) ~~Urg~~ Inducing self reliance through PM Garib Rozgar Protsahan Yojana, PM Swanidhi plan etc.

Thus, the need of hour is decent, empowered, formalised workforce (SDG-8) which are not job seekers but job creators.

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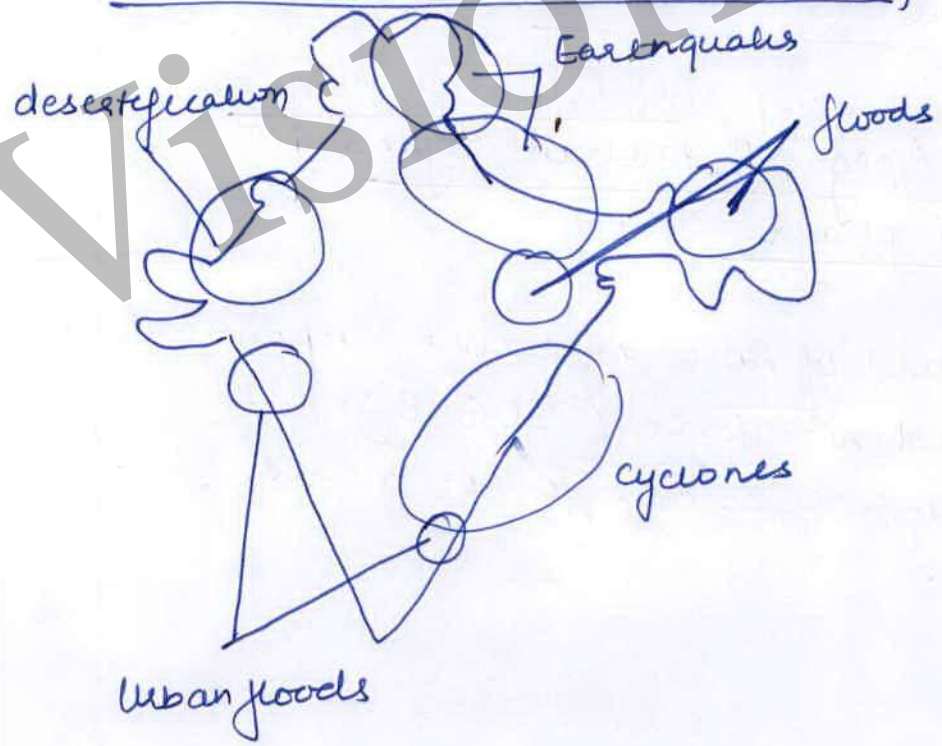
16. In view of the rapidly increasing socio-economic damage caused by disasters, integrating Disaster Risk Reduction (DRR) into development planning requires an effective stakeholder engagement mechanism. Discuss. **(250 words) 15**

आपदाओं के कारण तेजी से बढ़ रही सामाजिक-आर्थिक क्षति को देखते हुए, आपदा जोखिम न्यूनीकरण (DRR) को विकास योजनाओं में एकीकृत करने के लिए एक प्रभावी हितधारक जुड़ाव तंत्र की आवश्यकता है। विवेचना कीजिए।

About 86% of the Indian landmass is prone to disasters. Disasters like cyclones floods, droughts, fires, earthquakes and more recently COVID have reversed the socio-economic gains of the country.

VULNERABILITY OF INDIA TO DISASTERS



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Damage caused by Disasters

① Social
- Loss of life and Property
- Land degradation
- Interruption of Education
- Diseases & Disabilities
- crimes, conflicts

② Economic
- Infrastructure & crucial lines of connectivity & communication destroyed
- Financial loss of savings
- High cost of rebuilding
- Rescue efforts

Thus, this calls for integrating Disaster Risk reduction into development planning for effective stakeholder engagement:-

① Through stakeholder engagement → customised solutions can be created → No one size fit all

(Eg:- Mangroove plantation in coastal areas require participation of community [Odisha - community Disaster mitigation Programme]

② Better Response to early warning signals
[eg:- conducting mock drills in earthquakes]

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③ community knows best, use of stakeholder traditional knowledge in relief and rehabilitation missions

(eg AASHA workers during COVID-19 lockdown ensuring regular antenatal tests and immunisation)

④ Stakeholders when made aware can act as first responders

(eg Assam neighbours saving an old lady from ravaging floods)

③ Stakeholder engagement can help in Building Back better :-

(eg Latur women SHG - financial assistance after drought)

Thus

Developmental planning must create space for stakeholder engagement through decentralisation (in form of District Disaster management plans) greater awareness and participation of vulnerable population in relief, rescue & recovery efforts.

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17. Provide an account of the existing carbon trading mechanisms in India. Also, discuss the significance of an efficient carbon trading market in the country and state the challenges that currently exist. **(250 words) 15**

भारत में मौजूदा कार्बन व्यापार तंत्र का विवरण प्रस्तुत कीजिए। साथ ही, देश में एक कुशल कार्बन व्यापार बाजार के महत्व पर चर्चा कीजिए और वर्तमान समय में विद्यमान चुनौतियों का उल्लेख कीजिए।

Carbon trading mechanism seeks to work on the principle of 'cap and trade' wherein quotas for emission are set for each producer, those who achieve a reduction in their carbon emission target recieve a reduction certificate which can be ~~exchanged~~ sold to producers who exceed their target.

The carbon trading mechanism in India is managed by the Bureau of Energy efficiency and is called Perform Achieve and Trade scheme.

Co. A — Target 100GHG — Actual 90GHG — Recieve 'CER' 10GHG \ sell

Co. B — Target 50GHG — Actual 60GHG — Buy 10GHG / Carbon trading exchange

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Significance of an efficient carbon trading market:-

① Based on concept of polluter pays. therefore brings in environmental consciousness in corporates

② Incorporates value of clean environment in business reporting and accounting

③ Is in line with CDM (Clean Development Mechanism) of Kyoto Protocol

④ Encourages companies to invest in carbon emission reduction technologies through increased research

⑤ will help India to fulfil its enhanced Paris NDC's (Glasgow's Panchamrit promise – to remove 1 billion tonnes of carbon by 2030 and reduce carbon intensity of economy by 45%)

However challenges that currently exist)

① May face similar doom of CDM - no demand for Carbon Reduction certificates)

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② Lack of uniform guidelines for emission reporting - difficulty of qualitative measurement

③ Lack of third party environmental audit and monitoring mechanism for actual emission reduction

④ Inefficiencies in carbon certificate exchanges - No scalability

Wayforward

→ Investor awareness about environmentally conscious practices which will force companies to adhere to emission reduction

→ Importance to non financial environmental positive externalities created.

The government has brought the Energy Conservation (Ammendment) Bill 2021 to ensure efficiency of carbon trading.

VisionIAS

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18. The menace of drug trafficking in India has been on a rise due to a mix of factors, both internal and external. Discuss. Also, state the challenges posed by drug trafficking to India's national security. **(250 words) 15**

भारत में ड्रग ट्रैफिकिंग का खतरा आंतरिक और बाह्य दोनों कारकों के समन्वय के कारण बढ़ रहा है। चर्चा कीजिए। साथ ही, भारत की राष्ट्रीय सुरक्षा के समक्ष ड्रग ट्रैफिकिंग से उत्पन्न चुनौतियों का उल्लेख कीजिए।

Drug trafficking in India is influenced by both internal demand and external supply factors.

Internal Factors

① Weak laws and Regulations
- Narcotic & Psychotropic substances Act.
- Inefficiency of investigative agencies

② Demand for drugs created by
- social factors - peer pressure, unemployment glorification by media
- biological predisposition
- psychological - family problem, stress. childhood trauma

External factors

① Geographical proximity to Golden cresent (Iran, Afghanistan pakistan) and golden triangle (Cambodia, Thailand Myanmar)
huge quantity of Opioids, cocaine, heroine smuggled into India

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Challenges Posed due to Drug Trafficking

① Security Challenges

↳ Leads to terror financing (2015 Pathankot blasts due to terror financing created by drug trafficking)

↳ leads to encouragement of insurgency in border states (eg ULFA)

↳ Precursor to Arms trafficking (Arms traffickers check routes through drug trafficking)

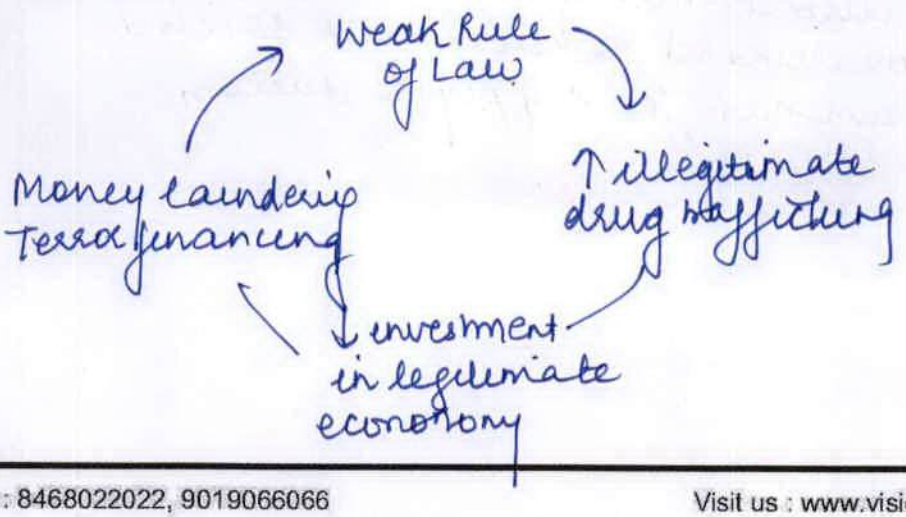
② Social capital loss

↳ Affects health of youth < Mental / Psycological

↳ causes interruption in education (anxiety, lack of focus)

↳ erosion of family values.

③ Economic loss



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Thus legitimate economy suffers due to drug trafficking.

Government steps
- → Drug demand Reduction plan
- → Nasha Mukt Bharat
  - ↳ Youth drug abuse curb campaign
- → Drug Reduction Reserve fund
  - ↳ financial assistance
- → Stricter Border control & custom checks

Wayforward
- → Adoption of best practices (eg Buddy Programme - Punjab government to make vulnerable youth aware of ill effects of drugs
- → Destigmatisation of victims so they can seek help.

Thus, the looming terror of drug trafficking must be curbed through behaviour change for demand reduction & strictly law enforcement for supply reduction

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19. The Andaman and Nicobar islands' strategic significance in the Indian Ocean region (IOR) has been underplayed by India's policy of 'masterly inactivity and benign neglect'. Critically discuss. **(250 words) 15**

हिंद महासागर क्षेत्र (IOR) में अंडमान और निकोबार द्वीप समूह के रणनीतिक महत्व को भारत की 'कुशल अकर्मण्यता और सौम्य उपेक्षा' की नीति के तहत कम करके आंका गया है। समालोचनात्मक चर्चा कीजिए।

The Andaman and Nicobars islands are inseparable part of India's heritage but their strategic significance have not been realised due to india's distorted policy.

Strategic significance of Andaman & Nicobar Island

- Important economic resources – Blue economy
- Important trade route (80% trade of oil passes through Indian Ocean)
- 15% fishing resources
- 28% of oil & natural gas reserves
- 18% of polymetallic nodules
- Importance as a naval base military base and Transhipment Hub
- Counter Chinese policy of chokepoints and string of pearls theory

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However, Indian policy has been that of :-

① Masterly Inactivity

↳ PRISON ISLAND during colonial era have not recieved fruits of development.

↳ Lack of connectivity with mainland remained aloof from infrastructure connectivity

② BENIGN NEGLECT

↳ Presence of a large tribal population (Eg:- Onge, Shompen, great nicobarese Sentinelese
↳ instance of attacks with foreign tourists)

↳ No effort to integrate them with mainstream society due to ~~Panchseel~~ TRIBAL PANCHSHEEL

↳ Rugged Terrain and Harsh Tropical Rainfall with thick dense forests have not evoked much government attention

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However, certain reforms have been undertaken :- INFRASTRUCTURE

1. Construction of Airstrip (BAAZ) and a naval port (INS Kolhassa) to counter Chinese influence in the region.

2. Construction of Chennai - Andaman Optical fibre network

3. INSTITUTIONAL - Establishment of Island Development Corporation to oversee development in the region

4. POLICY - Policies like Blue Economy, Sagar policy give due emphasis to islands in engine of development

5. However, a lot more needs to be done,

Wayforward → Andaman & Nicobar islands can ensure economic & geopolitical security through development of a TRANSHIPMENT PORT HUB

(Replicate the growth story of chittagong port)

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20. India has recently commissioned the world's first large International Liquid-Mirror Telescope (ILMT). How will the newly commissioned telescope aid in India's astronomical observations and research? **(250 words) 15**

हाल ही में, भारत ने विश्व का पहला विशाल इंटरनेशनल लिक्विड-मिरर टेलीस्कोप (ILMT) स्थापित किया है। यह नवनिर्मित टेलीस्कोप खगोलीय पर्यवेक्षणों और अनुसंधान में भारत की किस प्रकार सहायता करेगा?

The International liquid Mirror Telescope of India commissioned in Devasthal is the world's first large ILMT and a proof that India has arrived in the arena of astronomical observation and research.

The newly commissioned ILMT will aid the astronomical observation & research in the following way:-

① Provide scientific impetus and infrastructural boost in space observation - new discoveries on phenomenas like supernova, black holes, big bang, Quasars, gravitational lensing etc.

② This will help to gain practical proof of concept for some scientific theories and will give a push to interplanetary exploration

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(3) It will supplement India's effort of LIGO, Project NETRA and Hysis for neutrinos, and other space particles

(4) Aid missions like Gaganyaan & ~~Mangalyaan~~ Chandrayaan-2

(5) Empower leadership in early warning system about hazardous space debris or flyby asteroids.

(6) will also ensure continuous surveillance of India's space assets against malacious attacks

(7) This will lead to more such international collaborations between India & UK, France Belgium etc.

However, ILMT must also be complemented with adequate enticement of curiousity from Indian students, The ISRO's YUVIKA programme can pave way for genuine interest in space research.

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